

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

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October 2, 1997

Mr. James E. Rasmussen U.S. Department of Energy P.O. Box 550 Richland, WA 99352

Mr. Bill Adair Fluor Daniel Hanford, Inc. 2420 Stevens Center Richland, WA 99352

Mr. Van Leuven Waste Management Federal Services of Hanford P.O. Box 700 Richland, WA 99352

Dear Messrs. Rasmussen, Adair, and Van Leuven:

Re: Hanford Facility Dangerous Waste Part A Permit Application, Form 3, Revisions 4 and 5, for the 222-S Laboratory Complex (WA7890008967) (TSD: TS-2-1)

The Washington State Department of Ecology (Ecology) has received and reviewed the U.S. Department of Energy's (USDOE) above-referenced Part A permit application revisions submitted pursuant to Washington Administrative Code (WAC) 173-303-805(7)(a)(iv) and (iii).

Numerous communications have occurred regarding three issues related to the above referenced revisions. To date, two of these issues have been adequately addressed by your staff. Specifically, the changes reflected by Revision 5 of the Part A, regarding the 219-S Waste Handling Facility boundary and associated waste volume changes, are hereby formally approved. Similarly, the following proposed language regarding the interim usage of tank 103 is hereby formally approved for insertion in the next revision of the Part A permit for the 222-S Laboratory Complex:

"S02, T01 ... Tank 103 will periodically be used for primary and backup storage and for treatment (T01) and storage before transfer to the Double-Shell Tank (DST) System as required during construction. When



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On August 1, 1997, Ecology received a letter signed by James Rasmussen and William Adair stating "RL will keep Ecology informed of any off-site waste received by the 219-S tank system." Be advised, receipt of any off-site waste by the 219-S tank system is a non-permitted activity.

Ecology representatives met with representatives from USDOE, Fluor Daniel Hanford Incorporated (FDH), Waste Management Federal Services of Hanford (WMF), and WMF's corporate parent, Waste Management Incorporated (WMX), on August 21, 1997. The meeting was conducted to address outstanding compliance issues related to Ecology's March 25, 1997, Notice of Correction. During the August 21, 1997, meeting, the pending submittal of a Waste Analysis Plan (WAP) Addendum was discussed. In particular, the draft WAP deficiencies, as communicated by Ecology via a July 11, 1997, letter "219-S Waste Analysis Plan Addendum Deficiencies," were discussed in detail. As a result of this meeting, Ecology understands USDOE and its contractors will utilize comments provided to them in completing the WAP Addendum.

In addition, until the WAP Addendum is approved by Ecology, off-unit waste may only be accepted into the 219-S tank system on a case-by-case basis with prior approval by Ecology and off-site waste may not be accepted into the 219-S tank system. To further clarify, off-site waste may not be accepted into the 219-S tank system until an Ecology approved WAP is issued and the Part A permit is revised to allow receipt of off-site waste.

To summarize, actions numbered 1, 2, and 3 (below) must occur and action number 4 must be agreed upon prior to Ecology's approval of the 222-S Laboratory Complex Part A Permit which will allow the laboratory complex to receive off-unit waste:

- USDOE must submit a revised Part A permit which incorporates the above Section III.C proposed language;
- 2. USDOE must submit a revised Part A permit which incorporates the agreements made regarding the 219-S tank system boundary and associated waste volume changes;
- 3. USDOE must submit a revised Part A permit which incorporates the agreements made regarding the use of tank 103; and
- 4. Until the WAP Addendum is approved by Ecology, off-unit waste may only be accepted into the 219-S tank system on a case-by-case basis with prior approval by Ecology.

If USDOE is unwilling to revise the Part A permit as described above, Ecology will consider those permit conditions of revision 3 of the 222-S Laboratory Complex Part A Permit (11/01/94), in addition to the two resolved issues described above (219-S unit boundary and use of tank 103), to be those under which the 222-S Laboratory Complex is permitted to operate.

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In addition, the following actions must occur prior to Ecology's approval of the 222-S Laboratory Complex Part A Permit which will allow the laboratory complex to receive off-site waste:

- 1. USDOE must issue an Ecology approved WAP for the 222-S Laboratory Complex which includes verification procedures for off-site waste;
- 2. USDOE must submit a revised Part A permit for the 222-S Laboratory Complex which identifies off-site waste may be received by the 219-S tank system;
- 3. USDOE must issue an Ecology approved WAP for the DST System which includes verification procedures for off-site waste; and
- 4. USDOE must submit a revised Part A permit for the DST System which identifies off-site waste may be received.

If USDOE is unwilling to issue Ecology approved WAPs for the 219-S and the DST tank systems, off-site waste may not be accepted into the 219-S and the DST tank systems.

If you have any questions regarding the 222-S Laboratory Complex Part A permit, please contact Alisa Huckaby at (509) 736-3031. If you have any questions regarding the DST System Part A permit, please contact Laura Cusack at (509) 736-3038.

Sincerely,

Alisa D. Huckaby

Nuclear Waste Program

AH:LC:sb

cc: Paul Carter, USDOE
Cliff Clark, USDOE
Charles Hansen, USDOE
Tom Teynor, USDOE
Gloria Williams, USDOE
Russ Bisping, FDH
Sue Price, FDH
Roger Bowman, WMH
Duane Renberger, WMH
Kathy Tollefson, WMH

Jay Warwick, WMH
Jay Warwick, WMH
Joel Williams, WMH
John Winteralder, WMH
Mary Lou Blazek, ODOE

Administrative Record: 222-S Laboratory

Nuclear Waste Program

Complex

Administrative Record: DST System

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modifications to the tank system are complete and Tanks 101, 102, and 104 are back in service, Tank 103 will be drained and isolated . . ."

The remaining unresolved issue is related to the acceptance of off-unit and off-site waste without adequate waste description and verification procedures in place. Without the systems/procedures in place which adequately address waste verification concerns, Ecology is unable to approve the language proposed by USDOE to be inserted in Section III.C of the Process Section of the Part A. As such, Ecology has proposed the following language be used to address the outstanding issue until the concerns are adequately addressed:

"... The 222-S waste management units may receive returned Hanford samples or any portion of those samples as specified by WAC 173-303-071(3)(1). The 222-S waste management units may also receive offsite waste generated from the analysis of Hanford samples. (See "Dangerous Waste Permit General Information, Form 1" for Hanford Facility boundary delineation.) The 219-S Waste Handling Facility may not receive waste generated from the analysis of non-Hanford samples."

In a July 21, 1997, electronic mail communication, Ecology proposed the above language and recommended the language be used as a basis from which to work towards resolution of the issue. To date, the recipients of the proposal have not responded. Therefore, due to this outstanding issue, Ecology is unable to approve either revision 4 or 5 of the 222-S Laboratory Complex Part A Permit. As such, Ecology considers those permit conditions of revision 3 of the 222-S Laboratory Complex Part A Permit (11/04/94), in addition to the above described two resolved issues, to be those under which the 222-S Laboratory Complex is permitted to operate.

In addition to the unresolved issue associated with the 222-S Laboratory Complex Part A, Ecology has communicated (via electronic mail dated 4/2/97 and verbally during a 5/2/97 meeting) a position that the 219-S tank system constitutes a "pass through" waste management system whereby waste is stored and treated in the 219-S tank system making "the mixed waste more amenable for storage in the DST System" (DOE/RL-88-21 222-S Laboratory Complex, Rev. 5, 03/04/97, Page 3 of 20). As such, Ecology communicated an additional position that all waste accepted by the 219-S tank system is synonymous to that same waste being accepted by the DST system. Ecology has determined that it would be inappropriate for the 219-S tank system to accept "off-site" or non-Hanford waste while the DST tank system only accepts "liquid mixed waste generated on the Hanford Facility" (DOE/RL-88-21 Double-Shell Tank System, Rev. 8, 10/01/96, Page 2 of 36). During a meeting on 5/2/97, Cliff Clark agreed that if the 219-S tank system were to accept "off-site" or non-Hanford waste, the DST tank system Part A would first need to be revised to also accept "off-site" or non-Hanford waste.